

Claims

- [c1] 1. A surface cleaning device adapted for use with a vacuum cleaner nozzle inlet to clean a selected surface profile, comprising:
- (a) a housing including a surrounding sidewall positioned about a housing longitudinal axis to define a housing interior separated from an exterior environment;
 - (b) a divider disposed within said housing interior and adjacent to said surrounding sidewall, said divider is oriented approximately perpendicular to the housing longitudinal axis such that said housing interior is separated into a first housing interior and a second housing interior, said housing surrounding sidewall terminating in a first opening communicating between said first housing interior and the exterior environment and a second opening communicating between said second housing interior and the exterior environment, said first opening approximately matched in profile to the selected surface profile to be cleaned and said second opening approximately matched in profile to another selected surface profile to be cleaned; and
 - (c) a divider aperture collar that is adjacent to said divider forming a fluid communication therethrough said

divider between said first housing interior and said second housing interior, said divider aperture collar is positioned lengthwise to be substantially parallel to the housing longitudinal axis, said divider aperture collar is sized and configured to be removably engagable to the vacuum cleaner nozzle inlet to create a substantially fluid tight communication selectively between either said first housing interior and the vacuum cleaner nozzle inlet or said second housing interior and the vacuum cleaner nozzle inlet.

- [c2] 2. A surface cleaning device according to claim 1 wherein said housing surrounding sidewall that terminates into said first opening has a continuously curved perimeter surface defining said first opening that includes oppositely disposed concave sections and oppositely disposed convex sections, wherein said concave and convex sections are continuous, said concave or convex sections are approximately matched in profile to the selected surfaces to be cleaned that have a respective convex or concave profile.
- [c3] 3. A surface cleaning device according to claim 2 wherein said first opening that has a continuously curved perimeter surface has a plurality of bristles disposed upon said first opening that has a continuously curved perimeter surface.

- [c4] 4. A surface cleaning device according to claim 1 wherein said housing surrounding sidewall that terminates into said second opening has a continuously curved perimeter surface defining said second opening that includes oppositely disposed concave sections and oppositely disposed convex sections, wherein said concave and convex sections are continuous, said concave or convex sections are approximately matched in profile to the selected surfaces to be cleaned that have a respective convex or concave profile.
- [c5] 5. A surface cleaning device according to claim 4 wherein said second opening that has a continuously curved perimeter surface has a plurality of bristles disposed upon said second opening that has a continuously curved perimeter surface.
- [c6] 6. A surface cleaning device according to claim 1 wherein said housing surrounding sidewall that terminates into said first opening has a plurality of bristles disposed upon said first opening.
- [c7] 7. A surface cleaning device according to claim 1 wherein said housing surrounding sidewall that terminates into said second opening has a plurality of bristles disposed upon said second opening.

[c8] 8. A surface cleaning device according to claim 1 wherein said housing, divider, and divider aperture collar are constructed of materials selected from the group consisting essentially of polyethylene, polypropylene, and polyurethane materials.

[c9] 9. A surface cleaning device adapted for use with a vacuum and solution cleaner nozzle inlet to clean a selected surface profile, comprising:

- (a) a housing including a surrounding sidewall positioned about a housing longitudinal axis to define a housing interior separated from an exterior environment;
- (b) a divider disposed within said housing interior and adjacent to said surrounding sidewall, said divider is oriented approximately perpendicular to the housing longitudinal axis such that said housing interior is separated into a first housing interior and a second housing interior, said housing surrounding sidewall terminating in a first opening communicating between said first housing interior and the exterior environment and a second opening communicating between said second housing interior and the exterior environment, said first opening approximately matched in profile to the selected surface profile to be cleaned and said second opening approximately matched in profile to another selected surface profile to be cleaned;

(c) a divider aperture collar that is adjacent to said divider forming a fluid communication therethrough said divider between said first housing interior and said second housing interior, said divider aperture collar is positioned lengthwise to be substantially parallel to the housing longitudinal axis; and

(d) an adapter that includes a proximal end portion and a distal end portion, said adapter proximal end portion is sized and configured to be removably engagable to the vacuum and solution cleaner nozzle inlet and said adapter distal end portion is sized and configured to be removably engagable to said divider aperture collar, said adapter also includes a vacuum channel that forms a substantially fluid tight communication selectively between either the vacuum cleaner nozzle inlet and said first housing interior or the vacuum cleaner nozzle inlet and said second housing interior.

[c10] 10. A surface cleaning device according to claim 9 wherein said housing surrounding sidewall that terminates into said first opening has a continuously curved perimeter surface defining said first opening that includes oppositely disposed concave sections and oppositely disposed convex sections, wherein said concave and convex sections are continuous, said concave or convex sections are approximately matched in profile to

the selected surfaces to be cleaned that have a respective convex or concave profile.

[c11] 11. A surface cleaning device according to claim 10 wherein said first opening that has a continuously curved perimeter surface has a plurality of bristles disposed upon said first opening that has a continuously curved perimeter surface.

[c12] 12. A surface cleaning device according to claim 9 wherein said housing surrounding sidewall that terminates into said second opening has a continuously curved perimeter surface defining said second opening that includes oppositely disposed concave sections and oppositely disposed convex sections, wherein said concave and convex sections are continuous, said concave or convex sections are approximately matched in profile to the selected surfaces to be cleaned that have a respective convex or concave profile.

[c13] 13. A surface cleaning device according to claim 12 wherein said second opening that has a continuously curved perimeter surface has a plurality of bristles disposed upon said second opening that has a continuously curved perimeter surface.

[c14] 14. A surface cleaning device according to claim 9

wherein said housing surrounding sidewall that terminates into said first opening has a plurality of bristles disposed upon said first opening.

[c15] 15. A surface cleaning device according to claim 9 wherein said housing surrounding sidewall that terminates into said second opening has a plurality of bristles disposed upon said second opening.

[c16] 16. A surface cleaning device according to claim 9 wherein said housing, divider, divider aperture collar, and adapter are constructed of materials selected from the group consisting essentially of polyethylene, polypropylene, and polyurethane materials.